Abstract

The present invention provides methods of producing a surface with enhanced cell-adhesive properties comprising applying a stress to a polymeric matrix. The strained matrix is then modified by grafting a self-assembled monolayer onto the strained matrix, with the self-assembled monolayer comprising at least one exposed functional group. At least one cell-adhesive molecule can then be coupled to the at least one exposed functional group on the self-assembled monolayer to produce a surface with enhanced cell-adhesive properties.